

I. Project Title: **Native Aquatic Species Restoration Facility Operation and Maintenance**

II. Principal Investigator(s):
K. David Schnoor
Colorado Division of Wildlife
6655 Ct. Rd. 106 So.
Alamosa, CO, 81101
719-587-3392
email: dave.schnoor@state.co.us

Jenn Logan
Colorado Division of Wildlife
6655 Ct. Rd. 106 So.
Alamosa, CO, 81101
719-587-3392
email: jenn.logan@state.co.us

III. Project Summary:

The J.W. Mumma Native Aquatic Species Restoration Facility (NASRF), located in Alamosa, Colorado currently is rearing bonytail for stocking in the Upper Basin system for Colorado and Colorado Pikeminnow for the San Juan drainage.

IV. Study Schedule:
On going

V. Relationship to 2003 RIPRAP:

General Recovery Program Support Action Plan (page 23)

IV.A.4. Secure and manage the following presumptive stocks in refugia

IV.A.4.a. Razorback sucker

IV.A.4.a.(2). Upper Colorado River

IV.C. Operate and maintain facilities (page 24)

IV.C.4. Mumma

Green River Action Plan: Mainstem (page 27)

IV.A.1. Develop state stocking plan for the four endangered fishes in the Green River

IV.A.1.c. Implement plan

Colorado River Action Plan: Mainstem (page 35)

IV.A.4.b. Implement Colorado pikeminnow State stocking plan

IV.A.5.b. Implement bonytail State stocking plan

VI. Accomplishment of FY 2003 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

NASRF received 8,000 bonytail fry on 5/06/03 from Dexter NM. Survival was good, and we currently have approximately 7,000 bonytail weighing 62/lb in ponds at NASRF. Improvements at Trinity State Junior College (TSJC) have been completed and we moved approximately 21,952 of year class 2002 and 14,122 of year class 2001 to TSJC ponds on 4/02/03.

The bonytail at TSJC ponds did not fair so well. Approximately two weeks before pit tagging, the three smaller 0.1 acre ponds came down with *Ich*. Formalin was used to treat the parasite. We lost two of the three ponds to *Ich*, (approximately 4,000) of the largest 2001 fish. We now have approximately 2000 left in pond #3. The remaining 2001 fish were seined from pond 5 (2-acre pond) on 10/15/03. Only 562 of the 8,122 fish were recovered. The 2002 fish were seined from pond 4 (2-acre pond) on 10/21/03. Only 900 of the 21,952 fish were recovered. Ponds 4 and 5 experienced heavy bird predation early in the year as the fishing birds moved through. It was however surprising that so few fish were recovered from these ponds. The ponds were obviously not feeding well but observed mortality during the summer was minimal. The smaller 0.1 acre ponds were easier to protect from bird predation.

Plans to cover the three smaller ponds this fall are under way; the two larger ponds will not be covered. We should be able to meet the revised production schedule by utilizing only the three smaller ponds at TSJC. The *Ich* parasite appeared to be transferred to the Bonytail by tilapia which swam-up the drain pipes. This situation has been addressed and should not pose a problem next year.

NASRF received 8,000 Colorado Pikeminnow fry from Dexter NM on 6/02/03. Survival was good and we currently have 7,000 weighing 1000/lb. These fish are small because pond space was not available early in the year.

NASRF will have 1405 (9/lb) pikeminnow ready to stock in November and 2,574 (21/lb) ready for the spring of 2004.

NASRF stocked 574 razorback (5.7/lb) into recovery ponds near Farmington NM on 5/20/2003 and sent 2 razorbacks to display in Grand Junction. Approximately 45 razorbacks died in the *Ich* out-break at TSJC.

NASRF also PIT tagged and stocked 8,464 bonytail in Green River on 10/04/02, 4962 bonytail in the Green River on 10/10/02 and 885 bonytail in Colorado River #1 on 4/08/03. Total of 14,311 bonytail were stocked from 10/02 to 9/03.

Fish remaining on the station as of Sept. 30, 2003:

Species	Year class	Number	Size	# Ponds/Tanks
Pikeminnow	2002	2,574	21/lb	Pond #4 at NASRF
Pikeminnow	2002	1,405	9/lb	Pond #1 at NASRF
Pikeminnow	2002	500	95/lb	Pond #8 at NASRF
Pikeminnow	2003	7,000	1000/lb	Tanks 1,2,3,4 at NASRF
Bonytail	2003	7,000	62/lb	Pond #3 at NASRF
Bonytail	2002	11,000	21/lb	Pond #2 at NASRF
Bonytail	2002	400	30/lb	Pond #6 at NASRF
Bonytail	2002	900	20/lb	Pond #2 at TSJC
Bonytail	2001	1,593	6.2/lb	Pond #1 at NASRF
Bonytail	2001	1,400	12/lb	Pond #5 at NASRF
Bonytail	2001	500	4.6/lb	Pond #1 at TSJC
Razorback	2001	45	1/lb	Ponds #2 & 4 at NASRF
Razorback	2001	574	5.6/lb	Recovery ponds at Farmington NM
Razorback	2001	15	1/lb	Ponds # 3 at TSJC

Fish losses during the year were due to moving, lethal sampling for fish health inspection, *Ich* and predation. When possible, dead fish were preserved in ethanol for possible genetic work.

VII. Recommendations:

Continue culturing bonytail and pikeminnow at NASRF to meet the stocking needs of Colorado. PIT tag bonytail and pikeminnow for fall stocking.

VIII. Project Status:

On going fish culture.

IX. FY 2001 Budget Status

We were scheduled to receive approximately \$ 70,000 from the BOR. However, only \$17,000 was to be transferred into our budget and the rest was to come from Colorado's contribution to the recovery program. We have not received the \$ 17,000, nor was our account reimbursed from Colorado's contribution to the recovery program. The following list will reflect expenditures:

Feed	5,560.00
Equipment maintenance and repair	5,263.82
Travel	1,893.23
Stocking-vehicle use/maintenance	4,730.75
Utilities	14,991.85
Discharge chlorine	6,335.33
TSJC lease	18,000.00
TSJC pond improvements	9,921.90
NASRF pond improvements	13,839.27
Miscellaneous equipment	8,145.55
Labor	50,000.00
Total	138,681.82

Approximately \$37,000 of the total expenses were one-time expenditures.

X. Status of Data Submission:

XI. Signed: K. David Schnoor 18 November, 2003
Principal Investigator Date